

Report of Analysis

Submission: 2006-001597-NYHB
 Customer: Sprague Energy
 Terminal: OSWEGO SPRAGUE NY
 Vessel: MT JADE STAR
 Reference: V-06-00475
 Purchase Order:
 Date Received: 30-Mar-06
 Date Analyzed: 30-Mar-06
 Date Reported: 30-Mar-06

SPRAGUE PROVIDES THE ATTACHED INSPECTION REPORT/ANALYSIS REPRESENTING THE SPECIFICATIONS OF THE PRODUCT AT THE SPRAGUE TERMINAL IN TANK ON THE DATE OF INSPECTION NOTED ON THE CERTIFICATE. THIS ANALYSIS IS PROVIDED TO THE CUSTOMER FOR THE PURPOSE OF ESTABLISHING THE INDEPENDENT, VERIFIED PRODUCT SPECIFICATION ON A COMPOSITE BASIS IN SPRAGUE'S TERMINAL SHORE TANK AS NOTED ON THE CERTIFICATE. THE INSPECTION REPORT IS NOT TO BE USED FOR ANY OTHER PURPOSE. SPRAGUE DISCLAIMS ANY LIABILITY FOR THE PRODUCT AFTER DELIVERY BY SPRAGUE TO CUSTOMER. SPRAGUE DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR AN INTENDED USE EXCEPT AS MAY BE SPECIFICALLY SET FORTH IN WRITING IN ANY CONTRACT OR TERMS OF SALE BETWEEN SPRAGUE AND A BUYER OF PRODUCT. SPRAGUE ASSUMES NO LIABILITY FOR CLAIMS OR LOSSES THAT MAY ARISE FROM CUSTOMER'S USE OF THIS INSPECTION REPORT/ANALYSIS.

Lab Reference : 2006-001597-NYHB-001			
Sample Designated As : Shore Tank 5 original job# 1449-001 After Discharge Upper NO. 6 FUEL OIL			
Method	Test	Results	Units
D4052	API Gravity @ 60 Deg F	14.1	deg API
D4294	Sulfur	1.15	Wt %

Lab Reference : 2006-001597-NYHB-002			
Sample Designated As : Shore Tank 5 original job# 1449-002 After Discharge Middle NO. 6 FUEL OIL			
Method	Test	Results	Units
D4052	API Gravity @ 60 Deg F	13.8	deg API
D4294	Sulfur	1.20	Wt %

Lab Reference : 2006-001597-NYHB-003			
Sample Designated As : Shore Tank 5 original job# 1449-003 After Discharge Lower NO. 6 FUEL OIL			
Method	Test	Results	Units
D4052	API Gravity @ 60 Deg F	13.4	deg API
D4294	Sulfur	1.23	Wt %

Lab Reference : 2006-001597-NYHB-004			
Sample Designated As : Shore Tank 5 original job# 1449-004 After Discharge Running NO. 6 FUEL OIL			
Method	Test	Results	Units
D4052	API Gravity @ 60 Deg F	13.7	deg API
D4294	Sulfur	1.19	Wt %

Lab Reference : 2006-001597-NYHB-005			
Sample Designated As : Shore Tank 5 original job# 1449-005 After Discharge Equal UML Composite NO. 6 FUEL OIL			
Method	Test	Results	Units
D4052	API Gravity @ 60 Deg F	13.9	deg API

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Lab Reference : 2006-001597-NYHB-005			
Sample Designated As : Shore Tank 5 original job# 1449-005 After Discharge Equal UML Composite NO. 6 FUEL OIL			
Method	Test	Results	Units
D4294	Sulfur	1.19	Wt %
D445/D2161	Kinematic Viscosity @ 122°F	545.5	cSt
D445/D2161	Saybolt Furol Viscosity @ 122 °F	257.4	SFS
D95	Water	0.0	Vol %
D473	Sediment by Extraction	0.84	Wt %
D1796	Sediment and Water	0.1	Vol %
D93 method A	Corrected Flash Point	180	deg F
D482 @ 775 deg C	Ash @ 775 deg C	0.024	Wt %
D5708 Method A	Vanadium	27.3	ppm
D5708 Method A	Sodium	17.2	ppm
D5762	Nitrogen	0.36	Wt %
D240	Gross Heat of Combustion	18619	BTU / lb
D240	Gross Heat of Combustion	150907	BTU / gal
D3279	Asphaltene / n-Heptane Insolubles	1.08	Wt %
D4530	Micro Carbon Residue on 10% Bottoms	9.2	Wt %
D97	Upper Pour Point	12	deg C
D97	Upper Pour Point, deg F	53.6	deg F

Intertek Caleb Brett

Darius Pazdur, Laboratory Manager